

upward from the shoulder 20 beyond the rim 24 of the frame 12 by a distance slightly greater than the distance between the shoulder 22 and the rim 24 of the frame 12. When the other identical frame 12 of the pair is inverted and placed on top of the first frame 12 so that the rims 24 engage, the protrusions 26 of the inverted frame 12 interengage the protrusions 26 of the first frame 12 to define a hinge integral with the frames. One protrusion 26 of each frame 12 is positioned immediately adjacent the longitudinal center of the hinge, and the other protrusion 26 is across the longitudinal center from the first protrusion 26, spaced by a distance substantially equal to the length of one of the protrusions 26. The protrusion 26 on the inverted frame 12 adjacent the longitudinal center of the hinge is received within the space between the protrusions 26 of the first frame 12, and the protrusion 26 on the first frame adjacent the longitudinal center of the hinge is received between the protrusions 26 of the inverted frame 12. The protrusions of each frame 12 also engage the portion of the other frame 12 extending between the shoulder 22 and the rim 24, as can best be seen in FIG. 3.

The tempered metal spring clip 16 engages an anchoring lug 30 defined on the inner periphery of each frame 12, on the side of the frame containing the protrusions 26. Each spring clip 16 includes a curved body portion 32 and a flange 34 at each end of the body portion 32 which are angled toward one another on the concave side of the body portion 32. Each flange 34 engages a lobe 36 which is defined on the anchoring lug 30 and extends from the anchoring lug in a direction away from the rim 24. As is evident from FIGS. 3 and 5, the lobe 36 is spaced from the inner periphery of the frame 12, and one of the flanges 34 on the spring clip 16 engages the lobe 36 and protrudes into the space between the lobe 36 and the frame 12.

The engagement of the flanges 34 of the spring clip 16 with the lobes 30 of the frames 12 holds the frames securely together so that the protrusions 26 of each frame 12 are interengaged with the protrusions 26 of the other frame 12 of the pair, and engaged with the portion of the other frame extending between the shoulder 22 and the rim 24. The protrusions 26 are rounded so that the frames 12 may be pivoted easily about the protrusions. As the frames 12 are pivoted away from one another, the lobes 36 separate and, thus, stretch the spring clip 16 so that the curve in the body portion 32 of the spring clip 16 is straightened. When the frames 12 are separated to the point where the box 10 is fully opened, the spring clip 16 acts to maintain the box 10 in the opened position due to the fact that the force of the spring clip 16 at this point acts over the pivotal center of the hinge, away from the body 32 of the spring clip 16, due to the relative positions of the lobes 30 when the box 10 is fully opened. The lobe configuration and the size of the spring clip 16 are chosen so that the fully opened position of the box 10 is one in which the frames 12 are held apart at an angle slightly less than 90°. It is understood, however, that the box 10 can be designed to be maintained in a fully open position with the frames 12 forming an angle of 90° or more. When the frames 12 are forced out of their fully opened position by a slight amount, the force of the spring clip 16 acts against the lobes 30 on the side of the pivotal center of the hinge where the body 32 of the spring clip 16 is positioned. Thus, from this point on, the spring clip 16 biases the box 10 closed in a snap action.

Most of the area of the body member and the cover member of the box 10 is defined by the shells 14. Each shell 14 comprises a body portion 38 having a configuration complementary to the configuration of the frame 12 with which the shell 14 is to be used. As is illustrated in FIGS. 2, 5 and 6, the body portion 38 includes an outwardly directed flange 40 which is received on the ledge 18 defined on the inner periphery of the frame 12. The flange 40 is secured to the ledge 18 by sonic welding, adhesive, or other suitable means. In addition, the retaining lugs 20 extend over the edge of the flange 40 to aid in retaining the shell 14 in position in the frame 12 both during assembly and afterwards. In addition, a notch 42 is defined in the shell 14 adjacent to the anchoring lug 30 to accommodate the anchoring lug and the spring clip 16. The shells 14 may have various depths for a given peripheral dimension, and thus for a given frame 12, and may be made in a variety of colors and with a variety of surface textures and treatments.

In producing the box 10 according to the present invention, only one plastic mold or die is required to produce both frames 12 for the box. In addition, the hinge for the box 10 is defined by protrusions 26 integral with the frames 12 and only a separate spring clip 16 must be added. Furthermore, identical shells 14 may be attached to each of the frames 12 of a pair, or shells of various depths, colors and surface finishes can be applied to a given pair of frames in a wide number of combinations. Among the surface finishes contemplated are smooth finishes, dull finishes, embossments, and coatings of flocking material like felt.

Although it is apparent from the foregoing that the present invention provides significant advantages in the construction of boxes, it is understood that the various changes and modifications may be made without departing from the spirit and scope of the present invention as recited in the appended claims and their legal equivalents.

What is claimed is:

1. A container for storing and displaying merchandise comprising:

- a pair of identical frames;
- a shell secured to each frame to define a body member and a cover member for the container;
- protrusions on each frame which cooperate with the protrusions on the other frame to define a hinge; and

means for holding the protrusions together.

2. The container of claim 1 wherein each frame comprises a first protrusion adjacent the longitudinal center of the hinge and a second protrusion positioned across the longitudinal center of the hinge from the first protrusion and spaced from the first protrusion a distance substantially equal to the length of the first protrusion, the first protrusion of the other frame being received in the space.

3. The container of claim 1 wherein the protrusions are on a shoulder defined in the frame below a rim of the frame, the protrusions extending beyond the rim of the frame.

4. The container of claim 1 wherein each frame includes an anchoring lug, and the holding means comprises a spring clip engaging the anchoring lugs.

5. A container for storing and displaying merchandise comprising:

- a first frame and a second frame, each frame defining an internal ledge;